Technology in Coalition Training

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Technology in Coalition Training

Abstract

The Regional Security Cooperation Network (RSCN) initiative originated in the Office of the Secretary of Defense (OSD) and was subsequently designated as an activity of US Joint Forces Command. RSCN is not a physical network that requires substantial financial investment, hardware, software and technical support. Rather, it is a management improvement tool that leverages existing and exploits future information technology capabilities with the overall objective of improving training effectiveness while eliminating duplication of effort. RSCN is envisioned as an enabler of enhanced, US-led coalition education and training efforts that form the foundation of security cooperation and interoperability now and in the years to come.

As OSD's lead agent for RSCN, US Joint Forces Command must articulate the potential benefits of the RSCN concept to the Combatant Commanders and leadership of DoD education and training institutions

Introduction

In 1991, the dissolution of the Soviet Union brought an end to the "Evil Empire" and the bipolar struggle that dominated our military strategy and foreign policy for more than 40 years. This significant change in the complexion of global security, and the unprecedented success of the coalition military operation of Desert Storm, set the stage for a rapid military drawdown and a national focus on internal problems. The "Peace Dividend" of the early 90s left the uniformed services undermanned, under-funded, under-trained, and woefully ill-prepared to deal with the changing security environment. The threat of global nuclear war was quickly replaced with the realization of regional conflict, ethnic strife, and wanton terrorism.

The regional conflicts that erupted during the '90s (Somalia, Bosnia, Kosovo, etc.) uncovered another substantial problem of modern conflict resolution…coalition operations. Our allies of Desert Storm experienced the same "Peace Dividend" dilemma the U.S. military faced during that decade. The North Atlantic Treaty Organization (NATO), the alliance that slew the Soviet dragon, struggled with the question of "Out of Area" operations. Ad hoc coalitions faced severe interoperability obstacles associated with not only weaponry and hardware, but also proficiency, tactics, techniques and procedures at the staff and unit levels. These concomitant factors are readily apparent in the after-action reviews of the associated coalition operations and underscore the need to improve all aspects of coalition interoperability. Realizing that future crises involving both combat and non-combatant activities will be resolved through multilateral vice unilateral action, the United States had to do something to guarantee success.

Presently, and for the past several years, "Training Transformation" stands out as one of the hottest topics within the Department of Defense (DoD). Our leadership, both civilian and

military, realized that our training philosophy and techniques must evolve in step with today's sophisticated weaponry and surveillance capabilities, the ever-changing threat environment, and unique complexities associated with coalition operations. The DoD Training Transformation Initiative will provide dynamic, capabilities-based training for DoD to support national security requirements, and the DoD Training Transformation Implementation Plan was published by the Office of the Secretary of Defense for Personnel and Readiness (OSD P&R) in June, 2003.

The Regional Security Cooperation Network (RSCN) is a small facet of the DoD Training Transformation effort. RSCN was established in October 2000 by the Office of the Secretary of Defense (OSD) and designated as an activity of US Joint Forces Command (USJFCOM). The broad RSCN mission is to serve as a central coordinating activity and management improvement initiative to advise and facilitate world-wide coalition-based education and training programs. RSCN's primary objectives are to assure security cooperation among allies, friends and potential partners and to enhance the ability of United States and coalition forces to become more interoperable and more efficient in the conduct of multinational operations. This paper describes the RSCN program, USJFCOM's approach to its integration with the existing training environment, and articulates how military and civilian leaders, applying the correct proportions of priority, guidance and resources, can produce substantial results from a modest investment.

RSCN Program Description

RSCN reaches beyond the traditional "Joint" multi-service integration and coordination difficulties and targets the equally challenging (and potentially more demanding) realm of multinational operations. The RSCN program is a management improvement tool that enhances coalition-based education and traini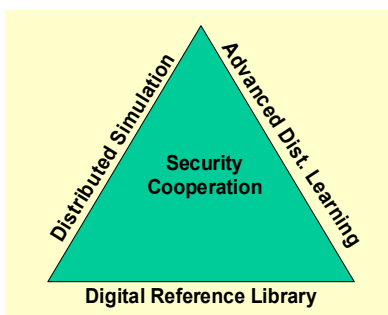ng by integrating and capitalizing on many different but related initiatives. The RSCN satisfies a vital need, one that has emerged since the reduction in cold-war tensions, to support coalition partners and facilitate security cooperation with countries not historically allied with the United States. The RSCN program incorporates the proven concepts of advanced distributed learning, modeling and simulation, and electronic digital libraries (Figure 1) to assist the combatant commanders in achieving their security cooperation goals and implementing their strategic plans for transforming traditional training into dynamic, capabilities-based training accessible anytime and anywhere. Advanced Distributed Learning (ADL) content was and will continue to be developed to complement and enhance in-residence professional military education and training. Distributed computer-assisted exercises are delivered synchronously to multiple permanent and temporary training sites within several regions. These efforts promote collaboration, practical problem solving, and active decision-making among senior officers in command post environments in response to numerous crisis scenarios. The RSCN program provides digital libraries for use in researching and referencing a vast array of handbooks, regulations, doctrine, and other documents in support of educational endeavors, exercises, and real-world events.

Figure 1 Security Cooperation Triad

The DEPSECDEF memo that established RSCN as an activity of US Joint Forces Command (USJFCOM) also dictated the following specified tasks to USJFCOM:

- Act as lead agent for facilitating coalition based, distributed education and training on a global basis.
- Consolidate associated requirements provided by the combatant commanders and heads of education and training institutions, including the regional centers.
- Annually produce a "capstone" document that describes the program and presents the consolidated requirements.

General guidance included building upon existing efforts and, where necessary, establishing new security cooperation capabilities through information and learning technologies. To accommodate the intended multinational audience, the RSCN program has relied on firewall-protected, unclassified, internet-based technologies and applications.

Operational Concept

The mission of the RSCN is to facilitate the implementation of coalition-based distributed education and training opportunities and capabilities on a worldwide basis to:

- Improve interoperability between the United States and foreign militaries
- Build strong relationships among the participating nations
- Enhance security cooperation and regional stability
- Reduce the OPTEMPO of US forces

The RSCN is a management improvement tool for security cooperation that leverages existing and future Information Technology (IT) capabilities with the overall objective of improving education and training effectiveness. The RSCN is an *enabler* of enhanced, U.S.-led coalition education and training efforts that will become the foundation of security cooperation and interoperability.

The US-sponsored NATO initiative, the Partnership for Peace (PfP), originated in the early 90's as a method to develop constructive ties with the armed forces and civilian defense communities of the former Warsaw Pact countries and European nations that are traditionally non-aligned. A wide variety of cross-training events were conducted each year, mainly occurring at the tactical, individual unit level. To relieve the financial burden the PfP nations would incur and encourage their active participation, the US provides substantial resources through the Warsaw Initiative appropriated funds. This financial resource enabled US forces to engage in interoperability training with small units of many PfP nations throughout the 90s. Looking back on the actual coalition operations of the decade, it was apparent there were critical gaps in this strategy. NATO and the PfP community lacked an ability to provide up to date educational material related to military doctrine, tactics, techniques and procedures to a widespread audience on a repetitive basis. Additionally, there was no cost-effective means available to train multinational staffs, including the PfP nations who joined real world coalition operations, in the essential warfare art of command and control.

At the April 1999 NATO Summit, the US Joint Forces Command and the Swedish Defense Wargaming Center, under the aegis of a Memorandum of Understanding (MOU) signed by our Secretary of Defense and the Swedish Minister of Defense, demonstrated the technologies and capabilities of a PfP Simulation Network that could provide multinational distributed simulation-based exercises similar in scope to major exercises being executed at the JFCOM Joint Warfighting Center. The demonstration included over one hundred participants representing twenty-six NATO and Partner nations, distributed at six sites across Europe and in the United States. Over 750 guests, including heads of state, ministers of defense, other cabinet-level officials, a wide range of flag and general officers, and representatives of major US and international media, viewed it. Additionally, within the context of a similar Memorandum of Understanding, the US Joint Forces Command teamed with the Swiss Federal Department of Defense, Civil Protection and Sport to provide an Advanced Distributed Learning capability for the PfP Consortium of Defense Academies and Security Studies Institutes. These two projects are the foundation and template for the Regional Security Cooperation Network and its expansion to other regions.

Toward Coalition Training Transformation

RSCN is not a physical, global communications network. Rather, it is a means of affecting a paradigm shift in multinational training techniques and leading our allies and future coalition members along the chosen path of US Training Transformation. The DOD Transformation Planning Guidance (April 2003) states "As the U.S. military transforms, it is in our best interest to make arrangements for international military cooperation to ensure that rapidly transforming U.S. capabilities can be applied effectively with allied and coalition capabilities. U.S. transformation objectives should thus be used to shape and complement foreign military developments and priorities of likely partners, both in bilateral and multilateral contexts." NATO adopted the US approach to training transformation at the 2003 NATO Summit, in Prague, Czech Republic, when it announced that Supreme Allied Commander, Atlantic (SACLANT) would be transformed into Allied Command, Transformation (ACT), a NATO Joint Warfare Center would be established, and a focused effort to reach out to the Caucuses and Central Asia vis-à-vis PfP was necessary. Additional NATO policy regarding the use of Modeling and Simulation (M&S) and ADL was influenced by the success of the RSCN program and published in a Military Committee Memorandum (MCM). MCM 064-03 states:

> Vision: To implement Prague Summit mandates in strengthening NATO – PfP collaboration and training as part of the transformation agenda, it is essential to build upon existing efforts, and only where necessary to explore the need to establish new Information Technology capabilities. The desired long-term end state vision is to provide Allies and Partners with a multinational training and exercise environment up to the CJTF "command and staff" level, supported by a near real-time interactive ADL and simulation environment that:
> - Supports combined, joint operations
> - Links military, political-military, and civil-military components into simulation, modeling and training
> - Integrates such distributed training with focused professional military education delivered through ADL

It is worth noting that strengthening NATO – PfP education and training not only benefits Partners, but NATO nations and the Alliance as a whole.

The Regional Security Cooperation Network program's operational concept supports the Transformation Planning Guidance and is based upon the four previously mentioned *interrelated objectives*:

- Improve interoperability between the United States and foreign militaries
- Build strong relationships among the participating nations
- Enhance security cooperation and regional stability
- Reduce the OPTEMPO of US forces

To enhance coalition-based interoperability, RSCN helps to rationalize fragmented regional training systems, concentrate energy and resources, collect and share lessons learned, and help to make multinational training a multinational responsibility. To promote regional stability and enhance security cooperation, RSCN helps to instill in partner nations a vested interest in regional security issues, strengthen effective military cooperation among regional militaries, and thereby enhance integration while preserving self-determination and promoting self-reliance. Finally, RSCN helps to reduce the burden on US Forces by fostering the ability of Partners to respond to regional humanitarian, disaster, and peacekeeping needs.

Program Activities

RSCN achieves its objectives through distributed Computer-Assisted Exercises (CAX) and ADL. These activities have been in progress since RSCN's inception in 2000. The following specific examples of successful activities underscore RSCN's effectiveness as an influence in coalition transformation.

Distributed Computer-Assisted Exercises

VIKING CAX series:

Viking 99 followed closely after the 1999 NATO Summit that showcased the PfP Simulation Network. It was a direct result of the US – Sweden MOU political initiative, and was the first in the series of "In the spirit of Partnership for Peace (PfP)" exercises, with each CAX there after "raising the training bar" for PfP participants and for Sweden as the CAX host nation. Both Viking 99 & 01 shared a similar scenario and structure (single multinational brigade in NATO Peace Support Operations (PSO), with Viking 01 having a more complex technical architecture. The Swedish model, *TYR*, similar to the Joint Theater Level Simulation (JTLS), was used in all Viking exercises.

Viking 03, conducted 2-12 December 03, provided training to commanders and staffs in three individual Multinational Brigades (MNB) and subordinate units, including cooperation with civilian organizations, in a UN mandated, NATO-supported, PSO using NATO procedures. Two of the three brigades, were designated for duty in a real world PSO and used the exercise as a bonus-training event. One Multinational Brigade Headquarters (not a standing Brigade) made up of members from different nations participated from a site in Sweden, the Nordic Brigade and one Battalion were a remote site in Finland, and the South Eastern Europe Brigade (SEEBRIG is

comprised of forces from Albania, Bulgaria, The Former Yugoslav Republic of Macedonia, Greece, Italy, Romania, and Turkey) participated from its new Headquarters in Constanza, Romania. Separate Battalions in Estonia, Croatia, Ireland and Uzbekistan participated as remote sites. NATO provided NATO advisors and a NATO cell that received reports from the brigades, functioning as a higher headquarters. The exercise also provided the opportunity for civilian organizations to train their staffs and/or support the training of the military staffs. More than 800 people from 20+ nations (including observers from Russia) participated in Viking 03 from multiple locations, highlighting the utility of this distributed approach to command and staff training.

Viking 03 was the first PfP CAX to be supported by pre-exercise academic instruction provided through ADL course material. Sweden's Peace Support Operation Staff Officer Course, normally taught in residence at the Swedish PfP Training Center, was transformed to ADL format, and participants were required to complete it online prior to the exercise. Similarly, the US produced, and Allied Command Transformation certified, Combined Joint Task Force (CJTF) training modules in ADL format that summarized the functions, routines, duties and responsibilities of the various positions and boards that comprise a CJTF.

The main interoperability goals were:
- Civil-Military Cooperation
- NATO Planning Process exposure
- NATO Peace Support Operations doctrine
- NATO Military Decision-making Process
- NATO Reporting Procedures
- Staff officer Responsibilities
- Language Proficiency

The diagram below shows the distributed nature of Viking 03.
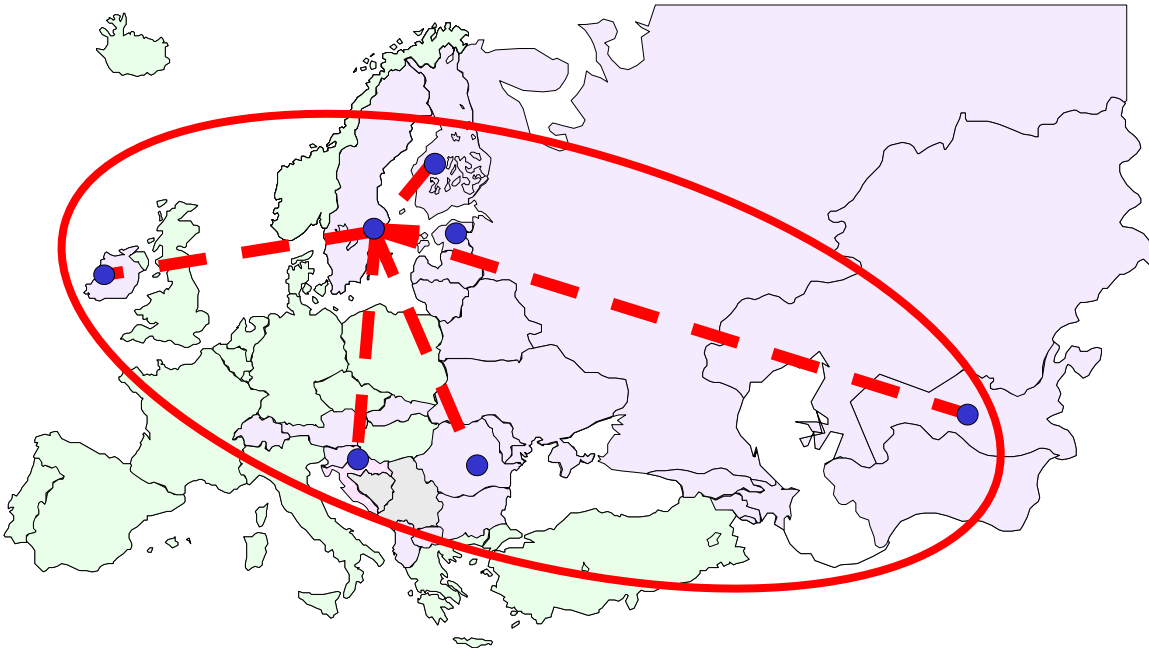
Figure 2 VIKING 03 Distributed network

SEESIM CAX series:

The Southeastern Europe Defense Ministerial (SEDM) process aims to contribute to regional security and stability and to enhance regional cooperation. The nations participating in SEDM include Greece, Italy, Turkey, and the U.S. from NATO and Albania, Bulgaria, Croatia, FYROM, Romania, and Slovenia from the Partnership for Peace.

On 9 October 2000, the Defense Ministers, desiring to further enhance interoperability and cooperation, agreed to "move forward" on a South East Europe Simulation Network (SEESIM) as a tool for integrating several related South East Europe Defense Ministerial initiatives through a series of simulation-based exercises. The immediate goal was to conduct a series of exercises beginning in 2002 with a demonstration exercise using a civil emergency scenario.

The Office of the Secretary of Defense requested USJFCOM support for this important political initiative and provided financial resources through Warsaw Initiative Funds to the RSCN program to carry out the planning and execution of SEESIM 02. The SEESIM 02 Demonstration and Exercise were hosted by Greece and were successfully completed in October and December 2002, respectively. SEESIM 04 will be hosted by Turkey and again supported by the United States in October/November '04.

SEESIM 02 also employs one of the elements of the NATO/Partnership for Peace Training and Education Enhancement Program, the Partnership for Peace Simulation Network, a main operational element of the RSCN program.

The broad training objectives of SEESIM 02 were:
- National coordination between MOD and MOI/Civil Protection in a crisis

- Test emergency response coordination and communication procedures
- Challenge national decision-making procedures
- Exercise regional civil-military emergency planning processes and communications procedures
- Promote regional security cooperation

Other relevant information regarding SEESIM 02 includes:
- Scenario: widespread earthquake damage throughout the region that forces nations to determine what outside assistance is required, make the request for assistance, and coordinate the external support.
- All planning followed the US Joint Forces Command exercise lifecycle standard, and the planning events took place in Athens. This provided an exposure to the US exercise planning process to both military and civilian planners.
- JTLS was distributed from the Hellenic Modeling & Simulation Facility in Athens to nine remote sites throughout Southeast Europe.
- The Exercise Control Group included members from each SEDM nation supported by expertise from JWFC.
- The Demonstration, essentially a dry-run of the exercise (necessary because SEESIM 02 was the first distributed CAX conducted in the region), occurred 14-24 Oct 02, and Greece hosted a Distinguished Visitors' Day where the SEDM Defense Ministers and their delegations observed the SEESIM process and progress first hand.
- The Exercise was conducted 9-19 Dec 02 and accomplished all national and regional training objectives.
- Lessons learned identified the need for:
  - Standardization of message formats and response procedures
  - Development of a regional training program on standard procedures
  - Establishment of a reliable means of national communications
  - A relevant, challenging, and realistic scenario to meet the training objectives.

Figure 3 SEESIM 02 Distributed network

SEESIM 04 will be hosted by Turkey at its new Modeling & Simulation Facility in Istanbul and will occur 27 Oct – 5 Nov 04. The broad training objectives and scenario discussion of SEESIM 04 follow:

- Build on SEESIM 02 lessons learned to improve national and regional communication and coordination in a crisis.
- Promote cooperation, coordination and interoperability among the SEDM nations and the SEDM Initiatives (South Eastern Europe Brigade [SEEBRIG], Engineering Task Force [ETF], and the Experts' Group on Defense-Military Support for Weapons of Mass destruction (WMD) Counterproliferation, Border Security, and Counterterrorism [CBSC], etc.)
- Explore issues associated with WMD Counterproliferation, Border Security, and Counterterrorism.
- Exercise national and regional consequence management.
- The scenario is based upon multiple terrorist attacks throughout the region that subsequently trigger catastrophic events in each nation requiring civil-military cooperation and coordination to protect the public, regional cooperation in relief activities, and border security. SEESIM 04 is not intended to be a venue for attacking terrorists; it is intended to be an exercise in consequence management.

Rescuer/MEDCEUR 03:

Rescuer/MEDCEUR 03, a US European Command sponsored "In the Spirit of PfP" CAX, occurred in June & July 03. The scenario was based on a crisis response/disaster relief scenario involving Georgia and other nations in the Black Sea region. The simulation, Joint Conflict and Tactical Simulation (JCATS) was distributed from Vasiani, Georgia (site of the Georgia Training and Equipment Program) to the Bulgarian Military Defense College near Sofia. This exercise embraced the US and NATO desire to reach out to the nations of the Caucuses and Central Asia.

- Participating nations include Azerbaijan, Bulgaria, Georgia and Ukraine.
- Main interoperability goals include:
  - Civil-Military Cooperation
  - NATO Military Decision-Making Process
  - NATO reporting procedures
  - Staff officer responsibilities
  - Language proficiency
- The participating nations received substantial training in US procedures and exposure to exercise planning in general, and the benefits of staff training through distributed CAXs.
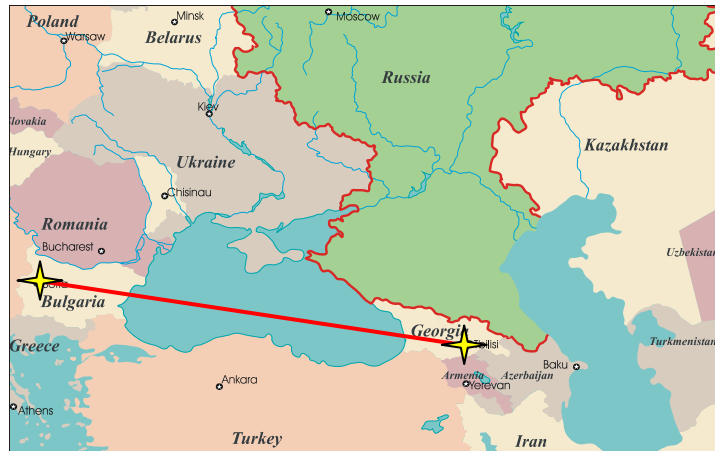
Figure 4 Rescuer/MEDCEUR 03 Distributed network

Advanced Distributed Learning (ADL)

The foundation for the RSCN Program's ADL effort is the US – Swiss MOU and USJFCOM's activities to support developing an ADL capability for the PfP Consortium of Defense Academies and Security Studies Institutes. In conjunction with Swiss counterparts, the US – Swiss leadership assembled a talented multinational team that developed an open-source Learning Management System (LMS) and multiple ADL courses based on DoD's ADL standards. The LMS is still under development, but will be fully compliant with DoD standards and delivered in 2004.

In 2002, SACLANT (assisted by USJFCOM) conducted an evaluation of the NATO – PfP ADL Prototype. The North Atlantic Treaty Organization / Partnership for Peace (NATO / PfP) Advanced Distributed Learning (ADL) Prototype Experimentation was carried on from May till December, 2002 to provide NATO with justification for developing an operational capability to expand the design, development, and delivery of web-based courseware within NATO. For the experimentation purposes, there were only four courses installed to the prototype. "Introduction to NATO" was the only course especially developed for this prototype by a multinational Cooperative Development Team under the leadership of the NATO Defense College. Other courses were developed for the PfP Consortium and used for the evaluation of the NATO/PfP ADL Prototype web site.

During the experimentation phase, the Human Factors and Medicine Panel members assisted by evaluating the prototype and documenting the lessons learned and experience gained. The NATO Training Group Joint Services Sub-Group Individual Training and Education Development Working Group assisted HQ SACLANT in determining the PfP requirements for ADL capability by conducting a survey. The survey showed there was general agreement on the five high priority areas defined earlier by the Military Committee in MCM 211/99. The English Language for NATO Terminology rated the most important, followed in order by Practice of Staff Procedures, Command and Control Operations, Staff Officer and NCO Training for Combined and Joint Operations, and, finally, Fundamentals of Alliance Military Doctrine and Standards.

The prototype evaluation was based on a 32-question survey submitted by students, faculty and other reviewers after completing each prototype course. The survey had four sections containing questions on Environment/Background, Website/ Technical / Computer, Content and Faculty and Curriculum related questions. The findings were based on 312 responses to this survey from students or test users to help evaluate accessibility and other technical issues as well as aspects related to learning objectives. In addition to this survey, NATO Defense College, NATO School (Oberammergau), US National Defense University, Baltic Defense College, Romania Military Technical Academy and Austrian Armed Forces conducted their own studies to evaluate the NATO/PfP Prototype with their students and faculty members. The results of these evaluations are very similar and conclusive of the fact that ADL courses are a very useful capability for the individual education and training needs of the soldier, seaman, airman and marine in the context of NATO interoperability, the staff education and training needs of Non-Commissioned Officers and mid-grade to senior commissioned officers, and the advanced professional education of senior grade officers and senior defense officials as well as their civilian counterparts.

The majority of respondents were members of NATO schools. Their responses supported that they are a homogeneous user group. Fifty-eight percent of respondents were students and twenty-two percent were staff members, representing eighty percent of respondents. Ninety percent were active duty military. Ninety-nine percent had intermediate or higher English language proficiency. This was the first Internet course taken by eighty-six percent of respondents. The graph below shows how the respondents replied when questioned about the usefulness of ADL.
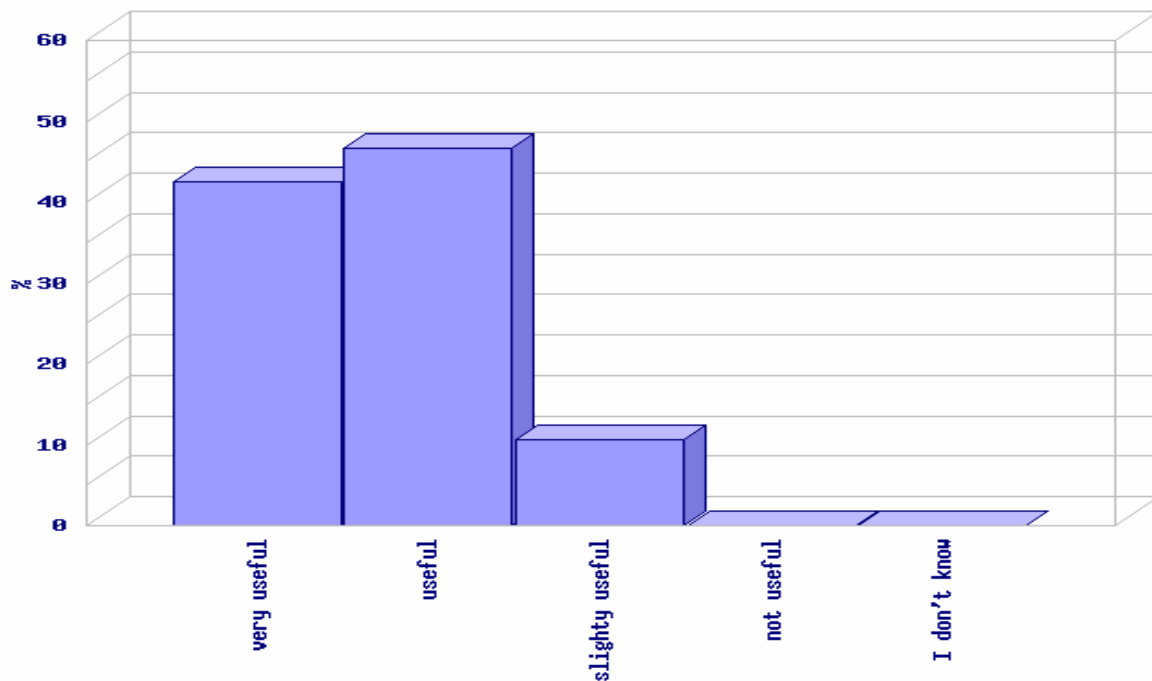

Figure 5 Extract of usefulness of ADL

ADL courses are being developed collaboratively by the NATO School (Oberammergau), the NATO Defense College, and the US National Defense University. As mentioned previously in the Viking exercise discussion, these courses are now integrated as pre-exercise academic preparation to enhance the individual's performance as a staff officer. Additionally, the NATO School and NATO Defense College are making selected courses a prerequisite for attendance at resident courses.

Conclusion

The Regional Security Cooperation Network Program has been a successful catalyst for transformation within the Partnership for Peace nations and a major influence in NATO's view of M&S and ADL. One may ask why RSCN has been successful in this environment, and why did this paper focus only on the efforts within Europe and the PfP nations. The answer is simple...all the right ingredients are present. The combination of the PfP and RSCN programs provides a political framework, money, a mandate, and attention to detail. RSCN's influence could be equally successful in other regions of the world given similar political commitment and financial resources. To achieve the goals regarding coalition transformation stated in the Transformation Planning Guidance, the US must step forward, provide the right ingredients, and sow the seeds of success.